

Abstract

A processor includes a scheduler operative to schedule data blocks for transmission from a plurality of queues or other transmission elements, utilizing at least a first table and a second table. The first table may comprise at least first and second first-in first-out (FIFO) lists of entries corresponding to transmission elements for which data blocks are to be scheduled in accordance with a first scheduling algorithm, such as a weighted fair queuing scheduling algorithm. The scheduler maintains a first table pointer identifying at least one of the first and second lists of the first table as having priority over the other of the first and second lists of the first table. The second table includes a plurality of entries corresponding to transmission elements for which data blocks are to be scheduled in accordance with a second scheduling algorithm, such as a constant bit rate or variable bit rate scheduling algorithm. Association of a given one of the transmission elements with a particular one of the second table entries establishes a scheduling rate for that transmission element. The scheduler maintains a second table pointer identifying a current one of the second table entries that is eligible for transmission.